DVD ERROR MAPPING SYSTEM BLOCK DIAGRAM

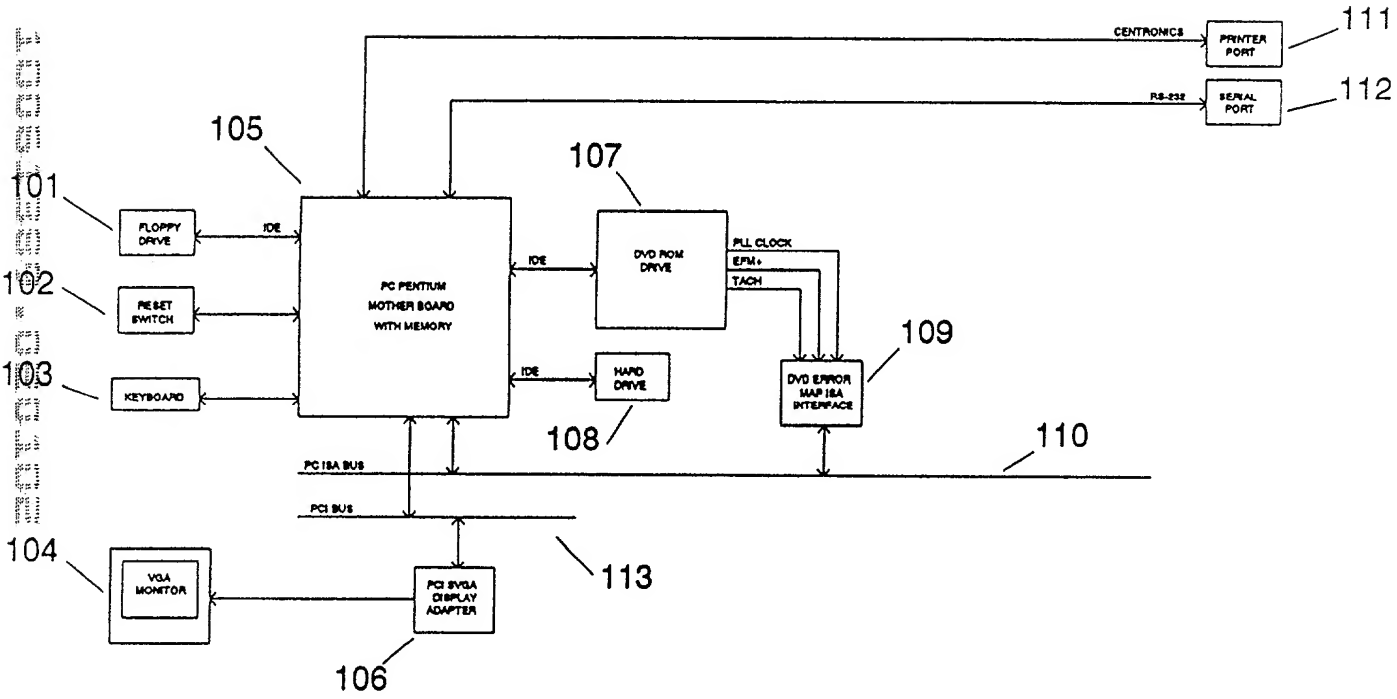
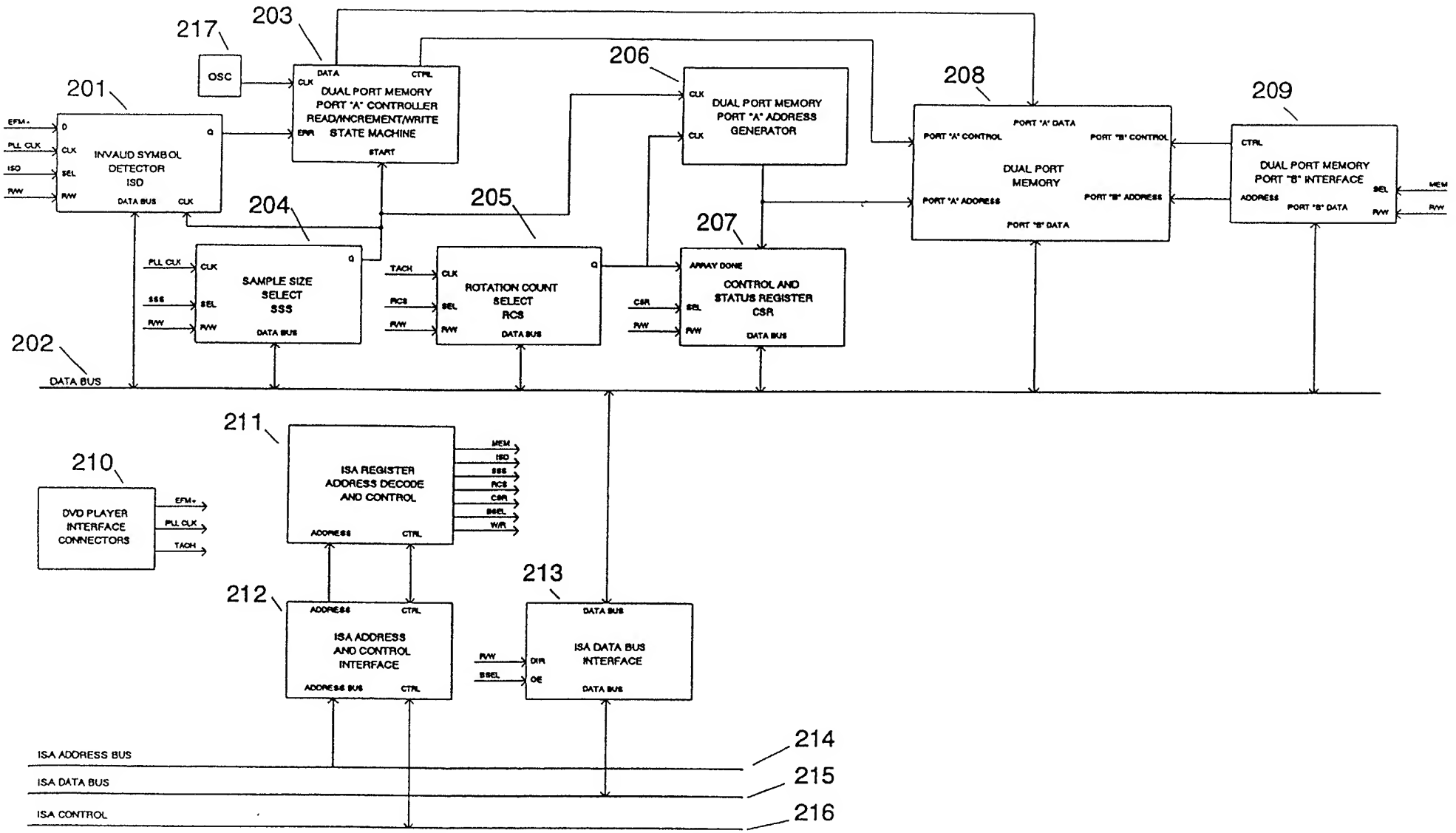


FIG. 1

DVD DIGITAL ERROR MAP ISA HARDWARE INTERFACE BLOCK DIAGRAM



DVD DIGITAL ERROR MAP ISA INTERFACE

INVALID SYMBOL DETECTOR REGISTER BLOCK DIAGRAM

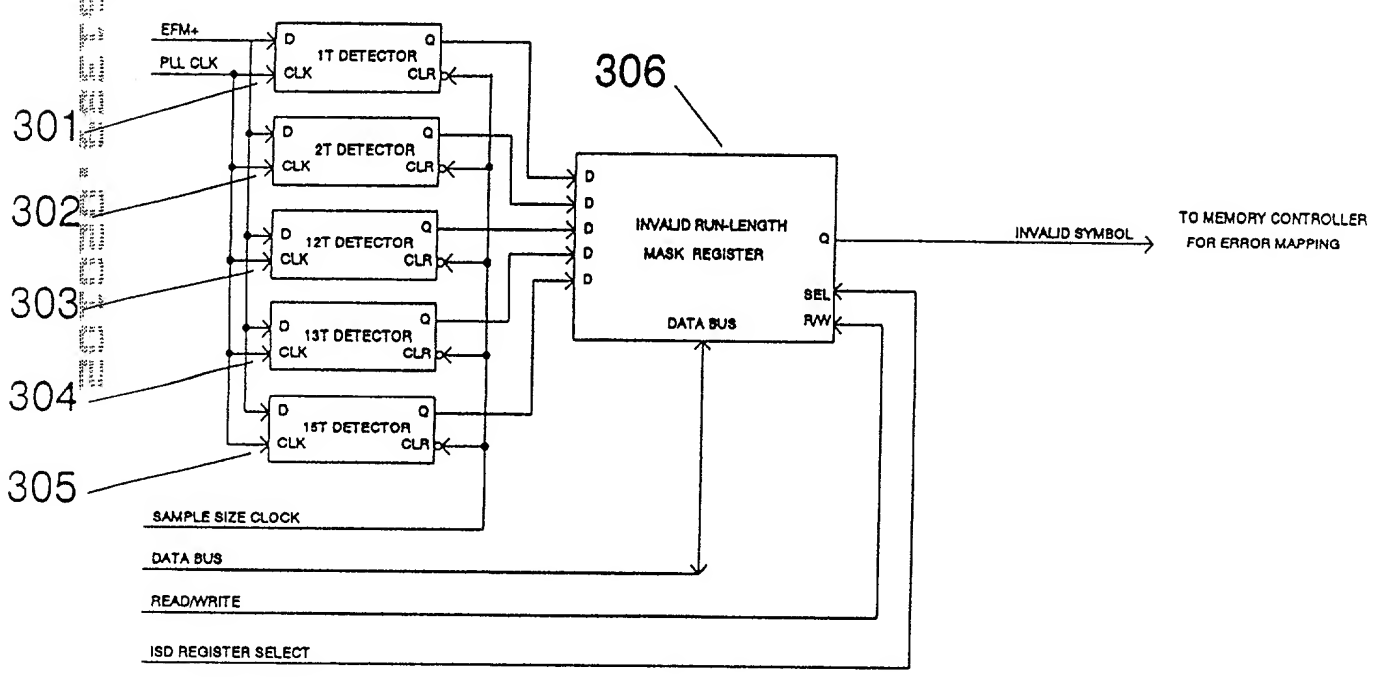


FIG. 3

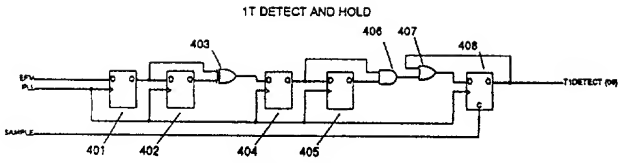


FIG. 4a

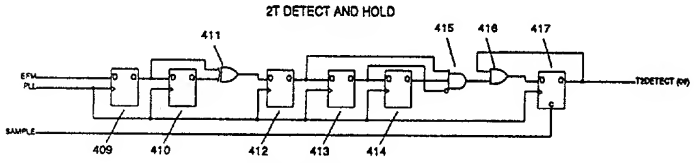


FIG. 4b

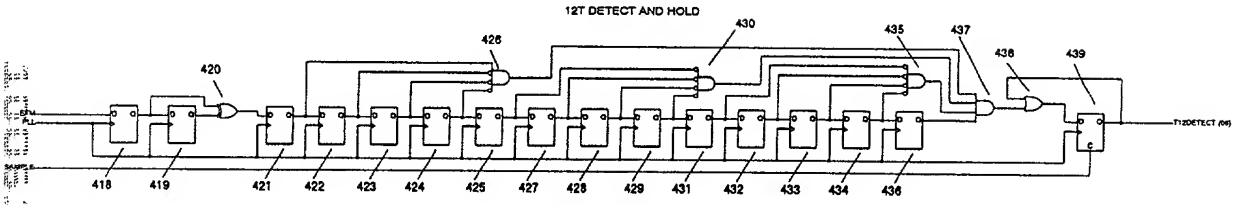


FIG. 4c

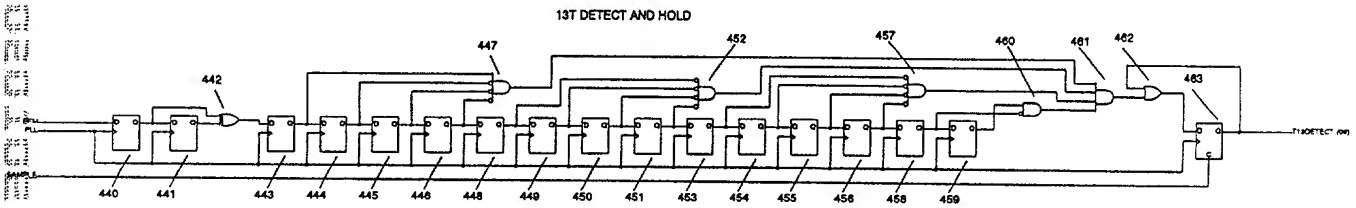


FIG. 4d

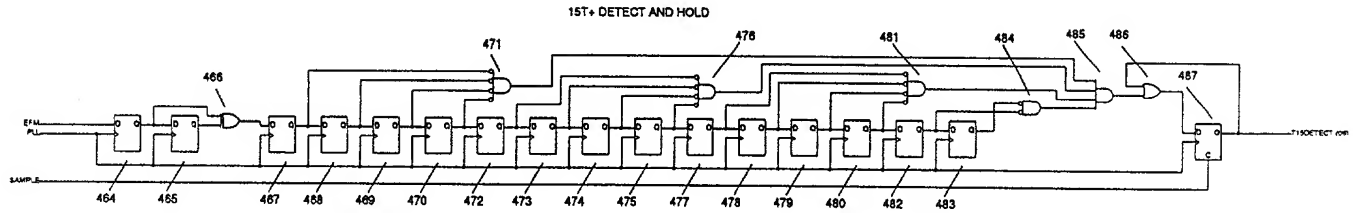


FIG. 4e

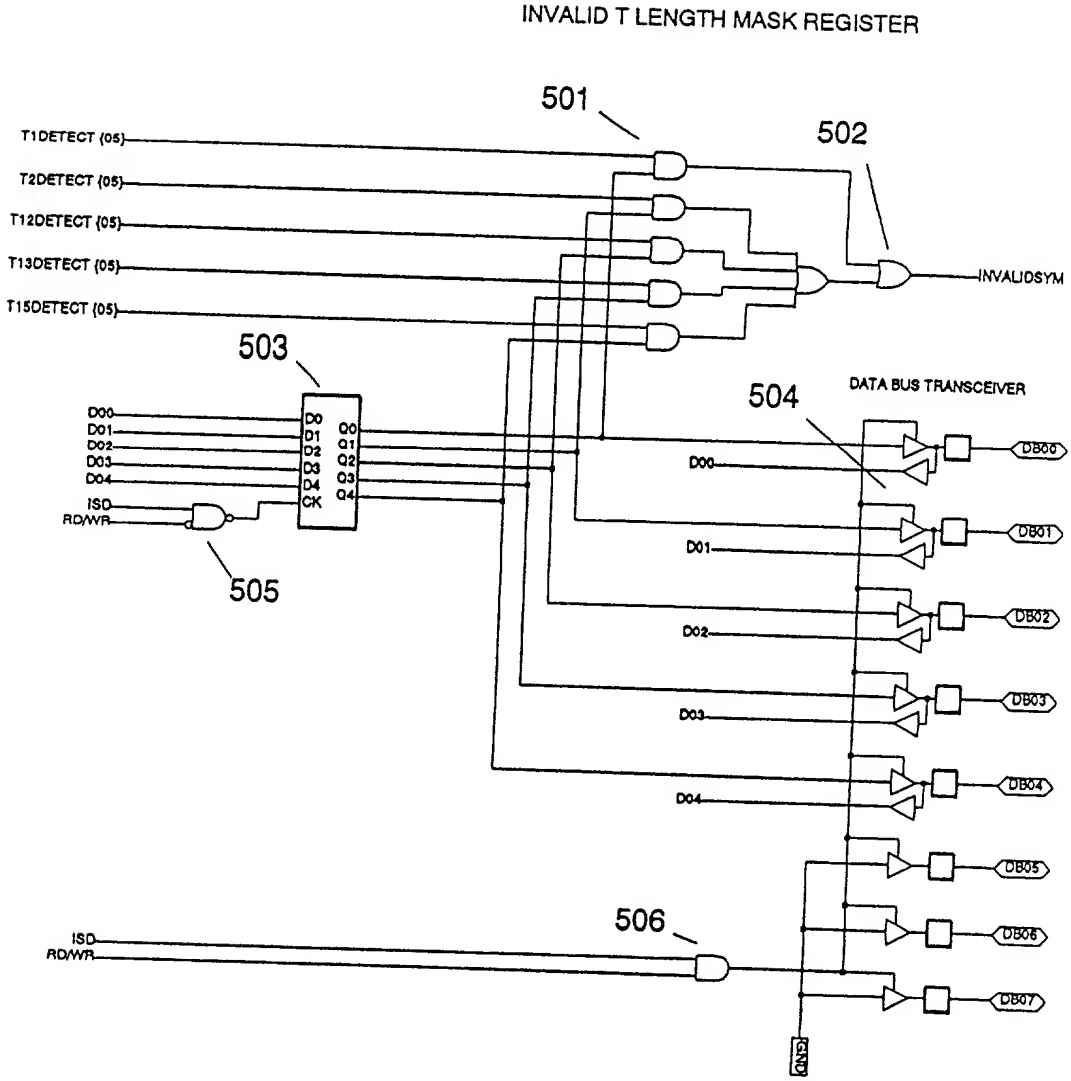


FIG. 5

PLL CLOCK
LENGTH
EFM+ NRZI
EFM+ NRZ
PITS AND LANDS
2T DETECT
1T DETECT
13T DETECT

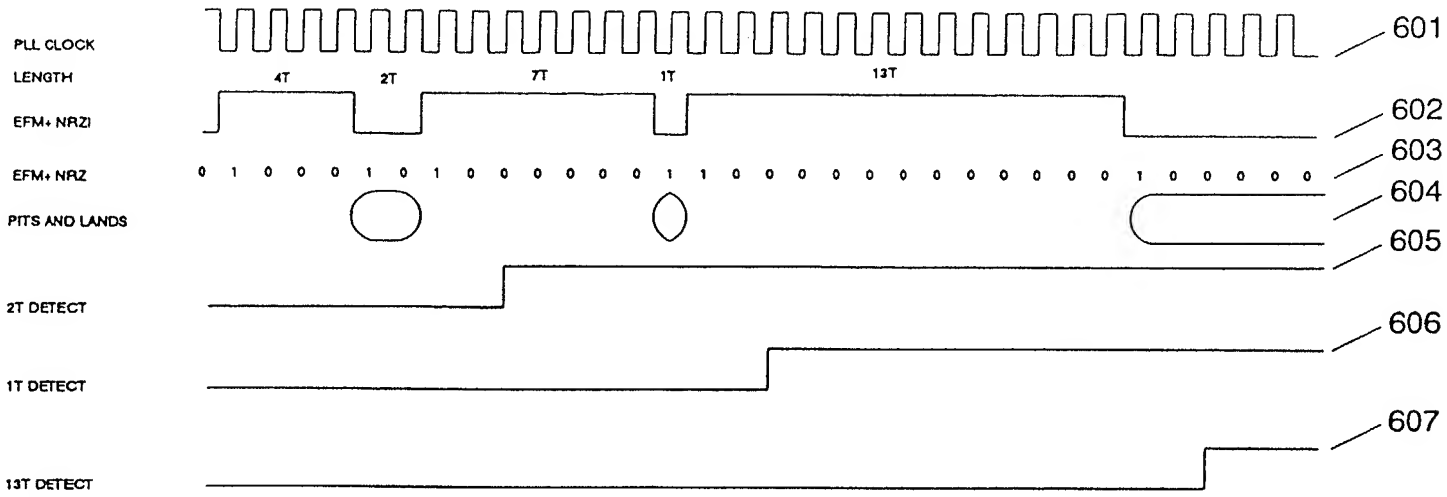

1T, 2T AND 13T INVALID RUN LENGTH DETECT EXAMPLE
PLL CLOCK
LENGTH
4T
2T
7T
1T
13T
EFM+ NRZI
EFM+ NRZ
0 1 0 0 0 1 0 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0
PITS AND LANDS
2T DETECT
1T DETECT
13T DETECT
601
602
603
604
605
606
607

FIG. 6

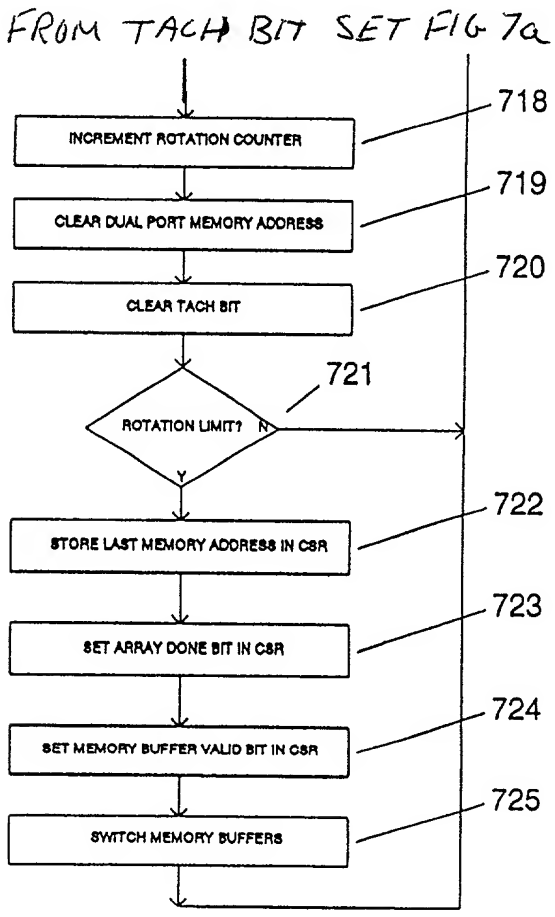

FROM TACH BIT SET FIG 7a
INCREMENT ROTATION COUNTER
718
CLEAR DUAL PORT MEMORY ADDRESS
719
CLEAR TACH BIT
720
ROTATION LIMIT?
721
N
Y
STORE LAST MEMORY ADDRESS IN CSR
722
SET ARRAY DONE BIT IN CSR
723
SET MEMORY BUFFER VALID BIT IN CSR
724
SWITCH MEMORY BUFFERS
725

FIG. 7b

ISA HARDWARE FLOW CHART

CREATING ERROR MAP ARRAY

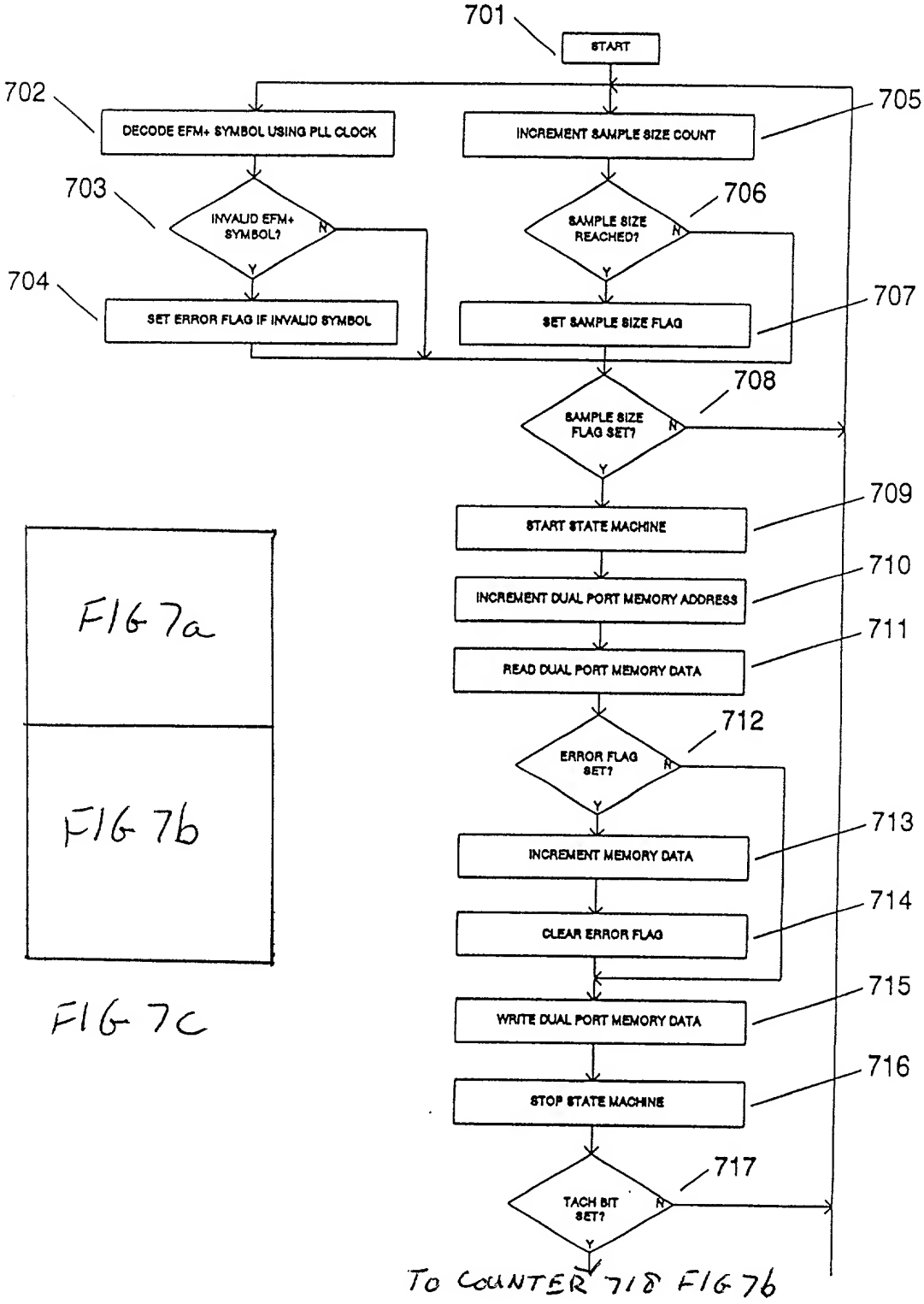


FIG 7a

FIG 7b

FIG 7c

DVD DIGITAL ERROR MAP ISA INTERFACE

SYSTEM SOFTWARE FLOW CHART

CREATING DVD ERROR MAP

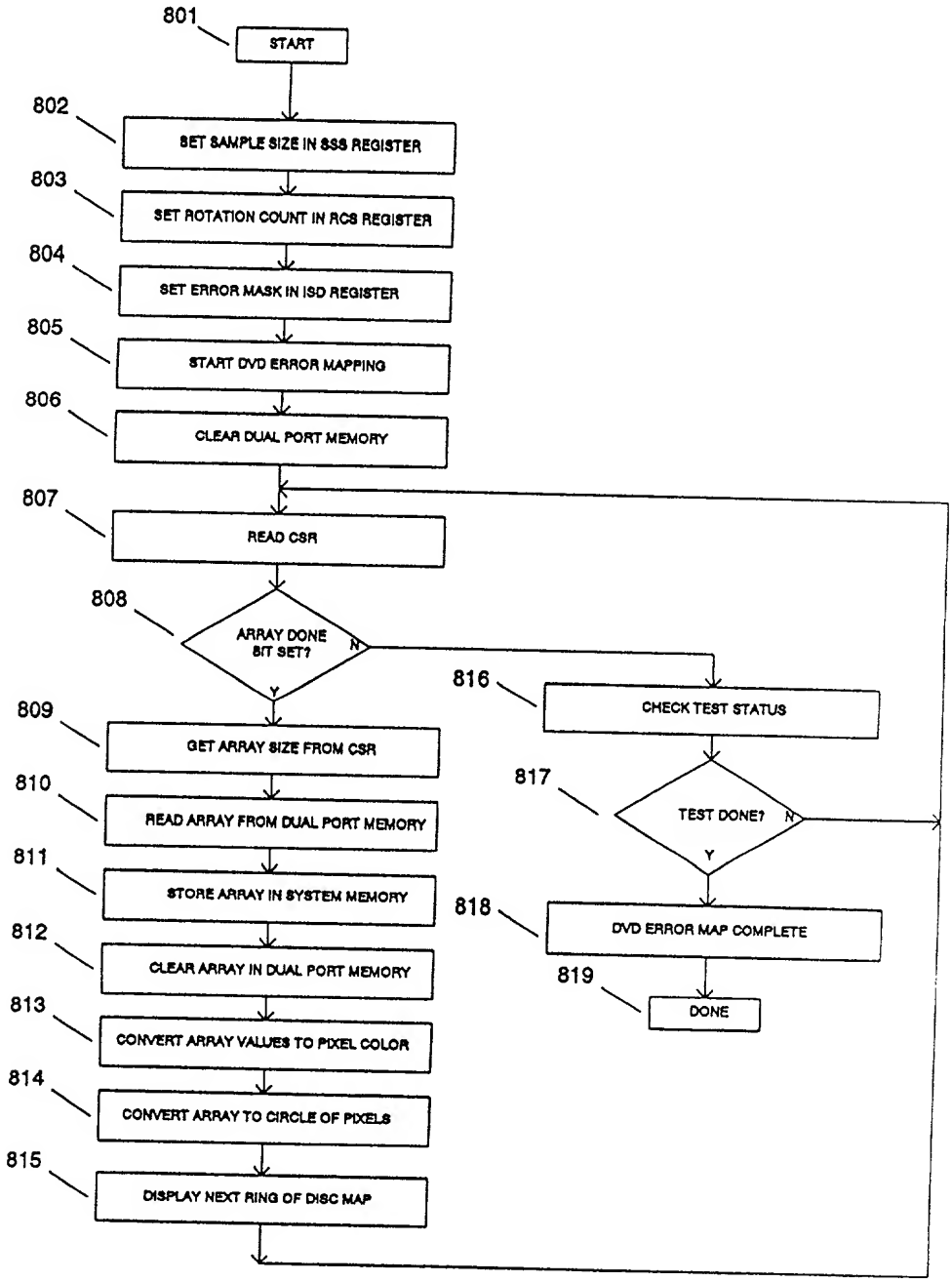


FIG. 8